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OCTOBER 2006

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INDUSTRY PROFILES:
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DIRECTAIR®

COMPRESSED AIR UTILITY SERVICE

BY KURT LANG

Compressed air has been called industry's 4th utility. Along with electricity, water, and natural gas, compressed air is a basic resource powering everything from hand-held pneumatic tools to plant-wide manufacturing systems. Most industrial concerns produce their own compressed air. Increasingly, however, manufacturers are beginning to treat compressed air as they would any other utility. They purchase compressed air, not compressed air equipment.

In simple terms, a third party supplier manufactures compressed air on a user's site, and the user agrees to purchase the quantity and quality of compressed air required. A pioneer and one of the largest suppliers in the U.S. is DirectAIR, a division of Air Technologies. Based in Columbus, Ohio, and with offices throughout Ohio, Pennsylvania, West Virginia, Kentucky and Michigan, Air Technologies is the largest distributor of Atlas Copco air compressors in the world.



Air Technologies Headquarters in Columbus, Ohio

DIRECTAIR® COMPRESSED AIR UTILITY SERVICE

Necessity Drives Invention

Providing compressed air as a utility service, pioneered in 1995, is possible because of expertise created out of necessity. Steve Schoeny, Corporate Utility Services Manager for Air Technologies, explains.

“In 1993, Air Technologies sold 20 compressors to a major gas utility company for filling their CNG vehicles, and we were responsible for maintaining the compressors. They had PLC’s (programmable logic controllers) that sent an alarm to a technician’s pager if a problem was brewing. When there was an alarm, a technician would drive to the site, which could be hours away, to address the issue. Too often he’d drive all the way just to hit a reset button.”

Schoeny says what solved the problem was the ingenuity of technicians. “We had some in-house techs who were extremely intelligent, knew our machinery inside and out, and had background writing software code. They decided to design and produce a control system to run compressors unattended 24/7 and monitor them remotely. Just like that we had something special.”

Air Technologies was already applying this remote capability for the utility company when they got a call from another business neighbor in Southwest, Ohio. “A steel mill was shutting down one of their on-site power houses,” says Schoeny. “They asked if we could supply them with compressed air — not air compressors, just compressed air.”

Schoeny talked it over with Phil Derrow, then president of the group and now the CEO of Ohio Transmission Corporation, the parent company of Air Technologies. The idea was interesting, the risk was manageable, and the potential was enormous. The necessary skills, the culture for risk taking, and the financial resources were at hand. With the equipment, expertise, technology and a responsive service organization at the ready, the venture looked promising.

Simply stated, it worked — to the benefit of all parties. Building on the success of the steel mill installation, Schoeny’s team began to develop the concept into a separate business that evolved into DirectAIR. As of the date of this publication, DirectAIR operates 21 air as a utility service sites in the U.S., mainly in the Midwest and Northeast.

Combined, these sites have 81 Atlas Copco compressors, 16,475 installed HP, the ability to deliver over 70,000 cfm, and total installed DirectAIR assets of nearly \$10 million. Significantly, because of Air Technologies’ application and service expertise combined with the superior reliability of Atlas Copco compressors, machines at DirectAIR sites have reliably logged more than 1.5 million running hours and delivered more than 61 *billion* cubic feet of clean, dry compressed air. In more than 500,000 hours of combined site operations, DirectAIR customers have not experienced a single continuous hour of lost production because of low air pressure. That is equivalent to more than 50 *years* of combined operation without an hour lost.



DirectAIR Installation With Atlas Copco Compressors



DirectAIR sites are monitored 24/7 by a certified master service technician

DirectAIR Is About Reliability

A customer that requires compressed air provides the necessary land and utility hook ups. DirectAIR supplies, installs, operates, and maintains a new air compressor system. A monthly fee is charged based on the customer's compressed air consumption, with billing similar to what a manufacturer gets from their electrical power supplier.

"DirectAIR customers never have to buy another air compressor or dryer," Schoeny says. "They never issue another purchase order for repairs or maintenance of compressors, and all but eliminate the possibility of costly production down-time due to loss of air or poor quality air. It's a different value proposition because we are really selling *reliability* — guaranteed reliability with more than 50 years of combined operational hours to back it up."

Because DirectAIR is selling reliability, the company takes responsibility for engineering the most reliable system possible. The heart of the systems are Atlas Copco compressors, filters and dryers because Atlas Copco, the world's largest manufacturer of industrial air compressors, has an outstanding record of designing and producing efficient, reliable machines. ManagAIR — today's version of the software created by Air Technologies' technicians — enables unattended operation and remote monitoring with intuitive, point-and-click access to real-time data. Air Technologies supports the operation with predictive and preventive maintenance.

"All DirectAIR installations have full feature, top-of-the-line systems," Schoeny explains. "We won't cut corners because we know what it takes to make a system 100% reliable. Our compressors don't have major failures because we never let them get close to that condition. This keeps costs low over the long term, which enables DirectAIR to offer fee-for-service compressed air cost-effectively for our customers."

"We won't cut corners because we know what it takes to make a system 100% reliable."

DIRECTAIR® COMPRESSED AIR UTILITY SERVICE

System Design

Every DirectAIR installation is built to meet a unique customer's needs and designed for maximum efficiency, performance and reliability. Our software manages the use of the equipment at the site assuring only the most efficient and reliable units are on line at any one time and notifies us electronically of any problems so they can be resolved before they can escalate.

The systems are modular so they can be decentralized, with multiple locations reducing operating costs and improving system-wide pressure balance. Modules are easily added or removed to address changes in the need for compressed air. This offers a degree of flexibility that's hard to duplicate with owned or leased compressors.

DirectAIR installations are as small as two 25-hp compressors that deliver 200 cfm and can be as large as a customer requires. For example, a new installation at an auto plant features twelve 350-hp compressors that deliver 18,000 cfm.

Financial Considerations

Corporate financial people are finding many reasons to like DirectAIR. There are no assets to purchase and no leases to capitalize, so DirectAIR is good for a company's balance sheet. It's a long-term solution but with the flexibility to cancel on short notice with minimal financial exposure. And, depending where a facility is located, a DirectAIR arrangement may lower property taxes.

DirectAIR improves planning by eliminating cost variables including service, repair, lubricants, disposal of oil, costs from inefficient machinery and controls, lost production and scrap due to poor air quality, and excessive in-plant maintenance due to poor air quality.

It's important to realize that DirectAIR is not a lease arrangement. It's a no-hassle, fee-for-service utility that includes:

- Design engineering, installation, and buildings
- All operation, maintenance, and service
- Guarantees with penalties
- Ability to cancel with a minimal charge

DirectAIR Advantages

- State-of-the-art technology
- Field proven reliability
- Total system responsibility
- Modular flexibility
- Fee-for-service simplicity
- Guaranteed performance

Focus On Core Competencies

"Selecting DirectAIR not only frees up capital for more profitable investment elsewhere in your business," Schoeny explains, "it enables your people to focus on your business instead of compressed air. It really comes down to core competencies. Our customers are in the business of manufacturing automobile parts or paper or fluid controls or chemicals or steel. DirectAIR is in the business of supplying superior quality compressed air with 100% reliability. Everything about DirectAIR focuses on being a compressed air supplier. It's hard to overstate the importance of this point. Since the beginning of the compressed air industry, customers have struggled to justify the investments in assets and people to design, purchase and maintain reliable compressed air systems, and frequently had to live with less than reliable results. With DirectAIR, customers don't have to live with anything but 100% reliability, guaranteed."

What started in 1995 with a single DirectAIR contract has grown continuously. Some in the industry view it as the new paradigm for compressed air — a flexible, reliable, cost-effective solution for industry's 4th utility.

DirectAIR is *not* a lease arrangement. It's a no-hassle, fee-for-service utility. Every DirectAIR arrangement includes:

- Design engineering, installation, and buildings
- All operation, maintenance, and service
- Guarantees without penalties
- Ability to cancel with a minimal decommissioning charge

For more information please contact Steve Schoeny at DirectAIR, tel: 1-800-536-8411 x632, email: sschoeny@aircompressors.com

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DirectAIR stations utilize Atlas Copco Air Compressors